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HUMAN RESOURCE ACCOUNTING METHODS: A LITERATURE REVIEW

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ABSTRACT

Human Resource Accounting is the process of assigning, budgeting, and reporting the cost of human resources incurred in an organization. Conventionally, according to general accounting principles, only monetary and physical assets are accounted in the books of account and there has been a failure to value human resources of an organization. However there is a change in this concept, now any expense on human resources should be treated as a capital expenditure because such expenses yield benefits for a long time period and should be shown as an asset in the Balance Sheet. The paper aims to review the literature available on human resource accounting. The paper tries to evaluate the historical background that led to the emergence of the concept of HRA. It investigates the various models both monetary and non-monetary that have been developed for the valuation of human resources.

KEYWORDS: Human Resource, Accounting, Valuation, Human Asset, Earnings.

1. INTRODUCTION

The success, growth and development of any organization is determined by how effectively and efficiently its organizational resources (both physical and human resources) are utilized. Physical resources include materials, money, machines, land etc that are scarce, are put to use by human resources in order to achieve the organizational goals. Thus, the optimum utilization of physical resources depends on the knowledge, skills, quality, experience, innovative thinking, motivation and other characteristics of human resources. The importance of human resource cannot be ignored and hence, its valuation and communication of the information of valuation to various stakeholders of the organization becomes of immense importance.

Conventionally, according to general accounting principles, only monetary and physical assets are accounted in the books of account and there has been a failure to value human resources of an organization. Traditionally, all the expenses on human resources like cost of recruitment, selection, training and development are taken into consideration and are treated as a charge against revenue because it is assumed that such expenses do not create any physical asset. However there is a change in this concept, now any expense on human resources should be treated as a capital expenditure because such expenses yield benefits for a long time period and should be shown as an asset in the Balance Sheet. Although Human Resource Accounting (HRA) concept came into being in 1960s but it recently gained importance in India.

According to the American Accounting Association's Committee on Human Resource Accounting (1973), Human Resource Accounting is defined as "the process of identifying and measuring data related to human resource and communicating this information to interested parties". Human Resource Accounting may thus be defined as an art of identifying, quantifying, recording, systematically presenting and communicating relevant information regarding human resources of an organization to the interested parties. It is the measurement of the cost and value of people to organizations in terms of recruitment, selection, training and development of employees and judging their economic value to the organization. The objectives of HRA are:

- To provide cost and value information for better and effective decision-making.
- To keep track of the changes in the value of human resource.
- To increase the efficiency of human resource of the organization.
- To communicate human resource information to the interested parties.

1.1 Need of Human Resource Accounting

Human Resource Accounting is not a recent concept but it emerged many decades ago. This concept has gained immense attention in last few years because of the following reasons:

- Weakness of financial accounting in treating human resources as assets of the organization.
- There is growing acceptance by many firms to the fact that human resource is the most valuable resource of any firm in generating competitive advantage.
- Many authors argue that expenses on human assets generate benefits for a long period of them, so they should not be charged against revenues in the same year of expenditure.

1.2 Methods Of Valuation Of Human Resource

Over the years, there have been significant developments in finding ways to measure knowledge, skills and other variables related to human resource. A number of methods or approaches have been developed for the valuation of human resource. These approaches to HRA may be classified into following categories:

I. **Monetary Approaches:** The approaches which take into consideration the monetary aspects are known as monetary models. The monetary models are classified into:

   A. **Cost Based Approaches:** Some of the cost based models of human resource valuation are acquisition cost model, replacement cost model, opportunity cost model, standard cost model etc. which focuses on the expenses incurred on human resource for its valuation.

   B. **Value Based Approaches:** Some of the value based approaches are adjusted discount future wages model, present value of future earnings model, stochastic rewards valuation model, net benefits method etc. which focuses on the value derived by an organization from its human resource for its valuation.

II. **Non-Monetary Approaches:** The approaches which focus on the behavioral aspects of human resource are classified as non-monetary approaches. Likert's Casual, Intervening and End result variables model of human valuation is one such approach.

2. OBJECTIVES OF STUDY

The study has been carried out with the purpose to understand the context of Human Resource Accounting and various methods available for valuation of human resource. The current study has been undertaken with the following objectives:

- To understand historical background of human resource accounting and what factors led to the emergence of this concept.
- To study some of the methods available for human resource valuation.

3. REVIEW OF LITERATURE

The review of literature has been divided into two sections in order to cover basic aspects of Human Resource Accounting. Firstly, it studies the historical background and need of human resource accounting that led to the emergence of Human Resource Accounting concept. Secondly, studies that have been taken to develop valuation models for the measurement of human resource of the firm have been focused.

3.1 Historical Background And Need of HRA:

This part of the study focuses on the evolution of the concept of human resource accounting which is majorly the limitations of the conventional accounting concepts and principles.

Flamholtz (1999) divided the development of HRA in five stages. First stage

(1960-66) marked the beginning of academic interest in HRA and focus was on developing HRA concepts from other studies like emerging concepts of HR, leadership-effectiveness theories, goodwill measurement. Second stage (1966-71) focused on developing and validating valuation models for HRA, earliest work done by R. Hermanson followed by other researchers to treat HR value as a part of goodwill. Third stage (1971-76) marked a rapid growth in research in HRA and focused on understanding issues and challenges related to application of HRA in organizations. Fourth stage (1976-80) saw a decline in research in HRA because large sums of money were required for deeper research which organizations were not willing to sponsor. Last stage (1980 onwards) experienced a sudden renewal of interest in HRA as many manufacturing economies became service economies whose growth depends upon intellectual assets of firm. Many firms actually started to adopt HRA practices.

Rao (2014) argued that financial statements without taking into consideration the concept of human asset does not give a true and fair view of firm's position. Employees are the reason that firms develop their competitive advantage. Many organizations like Kodak, P&G, Motorola, IBM, Ford, General Electric, Boeing, Xerox etc. have invested huge amounts of money in training and development of their employees; thus, there is a strong need to establish an investment perspective for human resource, which makes it mandatory to evaluate returns from investment made in human resource. Also, treatment of employees as assets provides them with a sense of job security and hence, it acts as an employees' morale booster.

Mir and Singh (2011) focuses on the need for practicing HRA. HRA helps in making better management decisions regarding human resource (recruiting, selection, training and development) as it focuses on long term impacts of such managerial decisions. It helps in measuring efficiency of HR function. It indicates true total worth of firm thereby, allowing better investment decisions by investors. Also, there has been increasing interest for accounting intangible assets in financial statements by Financial Accounting Standards Board (FASB) and Securities Exchange Commission (SEC), thus in future; HRA might become a part of International Financial Reporting Standards (IFRS).

Brummet et al. (1968) aimed to focus on the need for Human Resource Accounting. The financial statements prepared as per the conventional accounting principles and conventions are not adequate to answer questions relating to human resources like its value, changes, conditions, profitability, earnings capability etc. The trends in human asset investment ratio (human assets to total assets) can be useful predictor of future profit performance. There is a positive correlation between the investment in human resource and profitability of firm. Information about cost incurred from personnel turnover would be helpful to take appropriate remedial actions. HRA information is important for evaluation of alternatives, in taking capital budgeting decisions involving HR and evaluating investments in HR. HRA provides timely, relevant, verifiable and quantifiable information about HR to help taking informed decisions.

3.2 Methods Of Human Resource Valuation:

This area of study focuses on the various valuation models that have been developed over the years for the measurement of human resource. It has further been sub-divided into monetary and non-monetary approaches.

I. **Monetary Approaches:** This is further classified into cost based and value based approaches.

➢ **Cost Based Approaches:**

Pyle (1970) developed the Historical Cost Approach for valuation of HR and was assisted by R. Lee Brummet & Eric G. Flamholtz. Historical cost or acquisition cost or outlay cost or the original cost refers to the actual cost or expenses that are incurred on human resources in the form of recruitment, selection, training, development. Under this approach, the historical cost is capitalized and to be amortized over the expected useful period of human resource in the organization. In case, human asset leaves the organization before the expected period, the balance acquisition cost which is not amortized is fully charged against the income of current year. If actual useful life of the asset exceeds the expected useful life, the amortization schedule needs to be revised. Any additional cost incurred is also capitalized and written-off over the remaining useful life of human asset. The unamortized value is the value of human asset or the investment in human asset.

Flamholtz (1973) developed Replacement Cost Approach. The approach was first suggested by Rensis Likert. Replacement cost refers to the cost of recruiting, selecting, hiring, that a firm would have to incur to replace its existing human asset with human resource having equivalent experience, capabilities, talents and cost incurred for training and developing the replacement to meet present level of efficiency and familiarity with the organization. The human asset should be valued at its replacement cost to the organization from time-to-time.

Heckiman and Jones (1967) developed Opportunity Cost Approach and used competitive bidding for human resource valuation. The authors suggested a competitive bidding for only scarce employees within the organization to determine their opportunity cost. Opportunity Cost refers to the value of asset having an alternative use. Hence, only an employee who is scarce i.e. having an alternative use, forms a part of human asset. An employee is considered to be as scarce if its employment in one division deprives the other of the same talent. Various divisions bid for their required scarce employee and the employee is allotted to highest bidding division. The successful bid forms a part of this division's investment base. The opportunity cost of the employee of one division is determined by the offer (bid) made for such employee by other division in the same organization.

➢ **Value Based Approaches:**

Hermanson (1964) gave Adjusted Discounted Future Wages Model for human resource valuation. It is based on the assumption that the differences in the profitability of the firms are due to the differences in the efficiency of the employee. It thus, relates the valuation of human resources with the extra profits the firm earns over and above the normal industry's expectations. An employee's value to the organization is the discounted future wage stream adjusted for the efficiency ratio. The discounted future wage stream is the present value of wage payments to human resource for the succeeding five years using a normal rate of return in industry. Efficiency ratio is the weighted average ratio of actual average earnings of the firm to average normal earnings of all the firms in industry for last five years where weights are given in reverse order, highest weight 5 is given to current year and lowest weight 1 is given to preceding fourth year.

Lev and Schwartz (1971) developed the Present value of Future Earnings Model. The authors developed this model stating that value of human resource is the present value of his earnings in the remaining years of his employment with the organization. It is also called Capitalization of Salary Method. It is assumed that there is significant relationship between employee's salary (earnings) and his value to the firm. The total workforce is divided into homogeneous groups on the basis of age, skills, designation, tasks etc. and average annual earnings stream till their retirement is determined for each group. The earnings of each group are discounted at rate of cost of capital; the total present value of earnings of all the groups is the capitalized future earnings of the firm as a whole which represents the value of human resource. The authors also provided the valuation model in case of employee's death before retirement.

Flamholtz (1971) came out with Stochastic Rewards Valuation Model stating that value of human resource is the present value of the future benefits/services/rewards to the firm that an employee is expected to provide during his working life taking into consideration the fact that his movement from one organizational role to another is a stochastic process and so are the rewards. According to this model, the value of future services expected to be derived from an employee at each role that he is expected to occupy for different time periods in his service life is estimated along with the probability that he will occupy different roles for future periods. The estimated total value to be derived from all the employees is discounted at an appropriate rate to obtain value of human resource. Jaggi and Lau (1974) suggested valuation of human resource on group basis where group means homogeneous group of employees who might not be working in the same department. The Flamholtz's model was restated using groups instead of individuals because it is easier to predict the percentage of people in particular group who are likely to leave the organization or get promoted than to predict the same for an individual. The authors make an assumption of constant pattern of career movement and probabilities for one year are extended to future periods.

Morse (1973) developed Net Benefit Model and valued human resource as present value of net benefits derived from employees by an organization. It involves determining gross value of services expected to be received from employees in individual and collective capacity and of and the future payments to him. Net benefit derived from an employee is excess of benefits over payments. The present value of net benefits is determined by discounting it at a pre-determined rate usually the cost of capital. Such present value for all the employees of the organization represenrs the HR value.

Ogan (1976) argued that the value of human resource is the present value of certainty equivalent net benefits of all the employees. Net benefits are the excess of the expected benefits over its total cost. The certainty factor is the probability of employee remaining with the organization which is determined by his probability of continuation and survival. The product of net benefits and its certainty factor yields certainty equivalent net benefits. The present value of certainty equivalent net befits of all the employees gives the value of human resource of an organization.

Chakraborthy (1976) developed the Aggregate payment approach for human resource valuation. He valued HR in aggregate and not on individual basis and recommended separate valuation of managerial and non-managerial HR. The value of HR group is determined by the product of average salary of group and average tenure of employment of an employee of that group. The salary grade structure and the promotion schemes of firm would determine the average salary payments of the group. The present value of expected payments is computed by taking expected average after tax return on capital employed over average tenure as the discount rate. The total HR value is sum of expenditure on recruitment, selection, training and development and the present value of salary payments of all the groups of employees. The HR value should be shown under the head Investments on the asset side of the Balance Sheet. Also, the author advocated that the costs of recruitment, selection, training and development of each

employee should be shown separately and be treated as a deferred revenue expenditure that should be written off over the estimated average working tenure of the employee with the organization. The deferred revenue balance should be shown in the balance sheet of firm. In case an employee leaves firm or dies or is retrenched pre-maturely, then his balance of deferred expenditure should be written off against the profits of the year of exit itself.

II. Non-Monetary Measure

Likert and Bowers (1968) developed HR valuation model in which measurement of human resource value is done as a group to the organization. The authors have classified human variables into three categories namely, Casual variables, intervening variables and end result variables. The casual variables are independent variables that can be altered by management like organizational structure, leadership styles, managerial behavior etc. The intervening variables reflect internal performance capabilities and health of the organization like motivation, perceptions, loyalty, commitment etc. required for effective decision-making, communication. The end result variables are dependent variables that reflect the results achieved by an organization like productivity, revenue, costs, earnings, market share etc. The authors argued that a change in casual variables result in changes in intervening variables that produce change in end result variables. If a relationship between these three variables can be determined, then earnings trend can be predicted which can then be discounted to compute present value of firm and its HR.

4. CONCLUSION

There is a need to spread awareness about the implementation and benefits derived from HRA practices among both the employers and employees. Governmental and professional bodies should take steps to establish specific rules and regulations for valuing and reporting human resources. In order to encourage the implementation of Human Resource Accounting, there is a need to reach a consensus regarding the best valuation model for the measurement of human resource, an appropriate discount rate, best method for determining the future earnings of, benefits derived from employees by the firm, to spread the awareness regarding the need of HRA, greater recognition of HRA practices by governmental organizations, tax authorities and International Accounting Standards Board.

REFERENCES:

1. Brummet, R.L., Flamholtz, E.G. and Pyle, W.C. (1968). Human Resource Measurement -- A Challenge for Accountants. The Accounting Review, Vol. 43, No. 2 (Apr., 1968), 217-224.
2. Chakraborty, S. K. (1976). Human Asset Accounting: The Indian Context in Topics in Accounting and Finance. Oxford University Press.
3. Flamholtz, E.G. (1999). Human Resource Accounting: Advances, Concepts, Methods and Applications, Boston, MA: Kluwer Academic Publishers.
4. Flamholtz, E. G. and Likert, E. (1973). Human Resource Accounting: Measuring positional replacement costs. Human Resource Management 12(Spring), 8-16.
5. Flamholtz, E. G. (1971). A Model for Human Resource Valuation: A Stochastic Process with Services Rewards. Accounting Review, 46(2), 253-267.
6. Hekimian, J. S. and Jones, C. H. (1967). Put People on Your Balance Sheet. Harvard Business Review, January-February 45, 105-113.
7. Hermanson, R. H. (1964). Accounting for Human Assets. Occasional Paper No. 14, Graduate School of Business Administration, Michigan State University, 1-69.
8. Jaggi, B. and Lau, H.S. (1974). Toward a Model for Human Resource Valuation. The Accounting Review, Vol. 49, No. 2 (Apr., 1974), 321-329.
9. Lev, B. and Schwartz, A. (1971). On the use of the Economic Concept of Human Capital in Financial Statements. Accounting Review, 46(1), 103-112.
10. Likert, R. and Bowers, D.G. (1968). Organizational Theory and Human Resource Accounting. American Psychologist.
11. Morse, W.J. (1973). A Note on the Relationship between Human Assets and Human Capital. The Accounting Review, Vol. 48, No. 3 (Jul., 1973), 589-593.
12. Mir, Dr. A. A. and Singh, M. (2011). Human Resource Accounting (HRA) – A conceptual framework and International Developments. International Journal of Research in Computer Application and Management, VOL. 1, ISSUE 4 (JUNE), 108-114.
13. Ogan, P. (1976). A Human Resource Value Model for Professional Service Organizations. The Accounting Review, Vol. 51, No. 2 (Apr., 1976), 306-320.
14. Pyle, W. C. (1970). Human Resource Accounting. Financial Analysts Journal, September-October, 1970, 69-78.
15. Rao, Dr. A.L. (2014). Human Resource Accounting: a frame work for better Financial Accounting and Reporting. IOSR Journal of Business and Management, Volume 16, Issue 4, 86-90.